



March 27, 2009

Scott Fields  
Water Quality Program Director  
Coeur d'Alene Tribe  
P.O. Box 408  
Plummer, ID 83851

Subject: NPDES Permit Renewal Application, City of Plummer

Dear Mr. Fields:

USKH Inc. on behalf of the City of Plummer is submitting the attached revised NPDES permit renewal application, including forms 1 and 2A NPDES, for the City's wastewater treatment facilities. The City is requesting approval of this permit application from the Coeur d'Alene Tribe as the designated water quality agency with jurisdiction over the receiving water, Plummer Creek. The request includes asking that you or your designate as the Coeur d'Alene Tribe's representative forward an approval letter directly to Susan Poulson at EPA, Region 10, 1200 Sixth Street, Seattle, Washington, 98101.

This application includes two outfall descriptions, one for the present outfall, Outfall 1, located in the northeast corner of the existing treatment facility site, and Outfall 1B, located approximately 3,800 feet south-southwest of the new treatment facility site. Both outfalls are shown on Exhibit 1, accompanying this letter and the application forms. Supplemental information pursuant to Form 2A, Part B, Item B.5, follows:

Implementation Schedule:

New Wastewater Treatment Facility Bid Advertisement Date:	Mar. 11, 2009
Projected Wastewater Treatment Facility Bid Opening Date:	Apr. 21, 2009
Projected Wastewater Treatment Facility Construction Complete:	May 28, 2010
Projected Wastewater Treatment Facility Commissioning Complete:	Aug. 31, 2010

Plans and Specifications:

Plans include civil, architectural, electrical, structural and mechanical guidance for construction of the new facility. Plans have been approved for construction by USKH, USDA Rural Development in Boise by Kent Erickson, P.E., and at the Idaho Department of Environmental Quality in Coeur d'Alene by Gary Gaffney, P.E.

Proposed Water Quality Limits:

You have reviewed proposed Water Quality Limits. The proposed limits are shown in the table below:



**Proposed 2010 NPDES Permit Effluent Limitations,  
Discharge to Plummer Creek, Outfall 1B**

Parameter	Average Monthly	Average Weekly
BOD	10 mg/L, 90% removal, 27 lb/day	10 mg/L, 90% removal, 40 lb/day
TSS	15 mg/L, 90% removal, 40 lb/day	22 mg/L, 80% removal, 88 lb/day
Turbidity	2 NTU**	5 NTU***
Fecal Coliform	2.2#/100 mL	---
Total Phosphorus (as P)****	0.050 mg/L	---
TN*****	1.5 mg/L	2.5 mg/L
Flow	0.475 mgd Peak Daily, 0.315 mgd Average Monthly	
pH	Daily minimum $\geq 6.5$ , Daily maximum $\leq 9$	

\*Adapted from ERWF Table 4-5, and modified for Class A reuse standards

\*\* NTU = nephelometric turbidity units

\*\*\* Instantaneous peak limit

\*\*\*\* Total Phosphorus compliance is requested to take effect January 1, 2011 to allow for maturation of the filter process, operations, and biological systems.

\*\*\*\*\* Total Nitrogen as Ammonia

Data was collected from the City of Coeur d'Alene's wastewater treatment plant phosphorous pilot study. Four different dual-pass ion-exchange upflow clarifier/filtration technologies were used to determine total phosphorus levels in the effluent. Included in the technologies were the Bluewater BluePro and Parkson DynaSand; both of which are being considered for the Plummer Wastewater Treatment Plant. Additional total phosphorus data was acquired from AeroMod Inc.

The standard deviation and average were calculated for all the data from both the pilot study and AeroMod Inc. The data was then broken out into different ranges and number of data points per range. The number of data points per range was graphed versus the different ranges of data. A normal distribution curve was then added.

The total phosphorus permit level being requested is 0.050 mg/L. According to the statistical analysis, 72% of the data points are projected occur within this range under normal distribution, making the permit level a reasonable request.

Please inform us of the status of your concurrence with this application by April 6, 2009, to allow us to continue through the proposed schedule above. Please address your correspondence through Mayor Tim Clark at the City of Plummer, with copies to Alan Gay, P.E., at USKH's Spokane office.

Sincerely,  
USKH, Inc.



Alan E. Gay, P.E.,  
Project Manager

Attachments: NPDES Form 1  
NPDES Form 2A  
Exhibit 1  
Total Phosphorus AeroMod Graph  
Bluewater and Parkson Combination Total Phosphorus Graph  
AeroMod TP data  
City of Coeur d'Alene Wastewater Treatment 2006 Low Phosphorus Pilot Data

C: Tim Clark, Mayor, City of Plummer, P.O. Box B, Plummer, ID 83851  
Jim Kackman, Director of Public Works, Coeur d'Alene Tribe, P.O. Box 408, Plummer, ID 83851  
Jeff Beeman, USDA RD, 7830 Meadowlark Way, Suite C3, Coeur d'Alene, ID 83815  
Gary Gaffney, P.E., IDEQ 2110 Ironwood Parkway, Coeur d'Alene, ID 83814  
Susan Poulsom, EPA, Region 10, 1200 6<sup>th</sup> Avenue, Seattle, WA 98101